

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
11 July 2002 (11.07.2002)

PCT

(10) International Publication Number
WO 02/054802 A1

(51) International Patent Classification⁷: **H04Q 7/22**

[FI/FI]; Mannerheimintie 94 B 47, FIN-00250 Helsinki (FI). NEVANLINNA, Hanno [FI/FI]; Pohjoiskaari 6 A 22, FIN-00200 Helsinki (FI).

(21) International Application Number: PCT/FI01/01098

(22) International Filing Date:
14 December 2001 (14.12.2001)

(74) Agent: **OY JALO ANT-WUORINEN AB**; Iso Roobertinkatu 4-6 A, FIN-00120 Helsinki (FI).

(25) Filing Language: Finnish

(81) Designated States (*national*): AE, AG, AL, AM, AT, AT (utility model), AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ (utility model), DE, DE (utility model), DK, DK (utility model), DM, DZ, EC, EE, EE (utility model), ES, FI, FI (utility model), GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK (utility model), SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(26) Publication Language: English

(30) Priority Data:
20002750 15 December 2000 (15.12.2000) FI

(71) Applicant (*for all designated States except US*): **FUTURICE OY** [FI/FI]; Eteläinen Hesperiankatu 4, FIN-00100 Helsinki (FI).

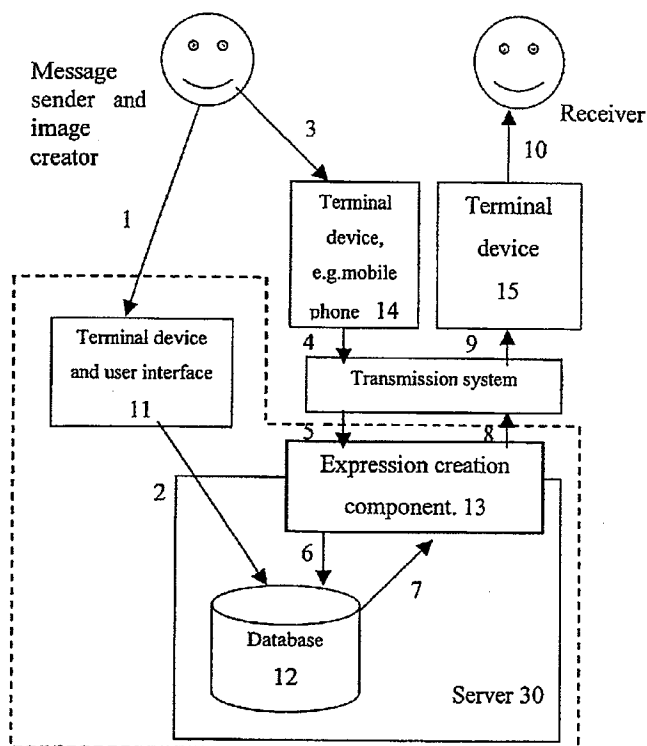
(72) Inventors; and

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),

(75) Inventors/Applicants (*for US only*): **VIHKARI, Mikko**

[Continued on next page]

(54) Title: METHOD FOR EDITING AND SENDING DATA



(57) Abstract: The object of the invention is a method and a system using said method for editing and sending picture information. According to the method picture information saved in means of the system is preferably edited by SMS:s and the edited picture sent to the receiver as a picture message.

WO 02/054802 A1



Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR,
GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent
(BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

— *with international search report*

Method for editing and sending data

The object of this invention is a method for editing and sending data. The method is suitable for use for example with a system, where a user can compose an image of a character, for example of themselves, and thereafter sending, using an ordinary mobile phone, messages that include the character showing various expressions and emotional states.

The user composes an image of the character using a www-user interface. The composed character is saved in a database in the system. After composing the character, the user sends to the system an SMS including information for editing the saved character, preferably instructions describing the emotional state, mimics and position of the character, and the receiver's telephone number. The system edits, with the help of the instructions, the image of the character saved in the database and sends the edited information, for example a new image, to the desired receiver as a picture SMS. Other information, for example a desired text message, can be attached to the image.

The present innovation also relates to a system, with which the user can create an image of a character, for example of him self, and thereafter send messages from a mobile phone, where this character shows different emotional states, mimics and positions or other information that can be presented graphically.

There are various ways to send electronic messages to a receiver such as, for example, e-mail and SMS or text messages. It has been possible to send messages including pictures as an attachment in an e-mail, or as picture messages consisting of several SMS (GMS, Graphic Message Service). The picture messages used in mobile phones include a small image and a limited amount of text. The user can order these pictures from a charged service, either to himself or directly to the receiver. Traditionally, these operate as follows: The service offers ready-made images that can be ordered for example by sending to the service an SMS including

the name of the desired picture. Some services also offer the user a possibility to design own pictures that thereafter can be ordered.

Smileys, for example ;-), are commonly used in short messages and e-mails to
5 describe the emotional state of the writer, which can otherwise be hard to express in
a short written text. Until the invention described here it has not been possible,
though, to use picture messages to express, in the manner of a smiley, the emotion
of the sender in a personal way using only a mobile phone to create the actual
message. With the existing systems it is also not possible to edit a personal
10 character and then send it as a picture message.

The present invention offers a new and unique communication system for
improving the expressive power of communication. The object of the invention is a
system and method in accordance with the patent claims. In the system that is the
15 object of the invention, the user can, with his terminal device (mobile phone, PDA,
personal computer or similar), send picture messages, preferably for example
showing emotions or other messages that can be expressed using a picture, to
similar terminal devices. The invention responds to the users' need to express the
emotion described in the message. A written text does not provide the receiver with
20 more than a part of the content the sender meant to express, because the wordless
communication is missing. Expressing an emotion is needed i.e. to avoid
misunderstandings and to increase the power of expression and/or clarify it.

The invention is an SMS-based system, in which users of normal mobile phones
25 can send each other messages, that include besides text preferably for example
pictures describing the emotional charge of the message or other picture
information that completes or clarifies the message. The emotions are expressed by
means of a character that can be edited by the user according to his wishes, for
example into an image of himself.

The invention and a preferable embodiment thereof is described in detail in the following, referring to the figures, where

Fig.1 is a graphic block diagram representation of a system according to a preferable embodiment of the invention,

- 5 Fig. 2 shows the method of logging in to the system and creating the character and Fig. 3 shows the transmission of a message in a preferred embodiment of the invention.

The same reference numbers are used in the Figures for corresponding parts.

10

The creation and editing of the character (1) and (23) is carried out for example through an interactive www- or wap-based user interface (11) or with SMS or e-mail messages. After registering (16) to the system the user receives a password in an SMS (19). With the help of his phone number and the password he received, he
15 can now log in to the system (20).

- To create (23) a character with the help of an interactive www-user interface is easy, because while creating the character the user can utilize ready-made components saved in means belonging to the system, preferably for example
20 different eyes and noses. Drawing the character thus requires no special talents. In the user interface (11) the character is drawn in a basic state and the generation of mimics, gestures and positions takes place automatically in the system. It is also possible to edit the character using SMS. In the message, the appearance of the character is described, and not its facial expression, for example as "long hair, big
25 mouth, small nose". The third user interface-model is a wap-site, the functionality of which can be based either on a www- or an SMS-based model, or a combination of the two.

The edited character is saved (2) and (24) in the system database (12).

30

After creating himself a character the user can design a picture message showing the character by sending (3), (4) and (25), (26) a message (12) and (27) to the system. The message is preferably, for example, an SMS, e-mail or from a wap- or www-site sent message. The message preferably includes, for example, words
5 describing the emotion, position, situation and/or the equipment of the character, and/or other information intended for editing the character. This description is free-form, i.e. the user does not have to remember certain codes or keywords. Further, the message includes the phone number of the receiver or other information about the receiver and/or other information necessary for delivering the message and the
10 message text. If needed, a code identifying the service can be added to the beginning of the message. The message as a whole (12) and (27), could be, for example, as follows: "I am happy, I am wearing sunglasses. +358501234567. Hello and greetings from Italy! The holydays have started excellently. Greetings Kustaa"

15 The system receives (5) the message (12) and (27) and interprets the description therein. The expression creator component gets (6), (7) the senders character from the database (12) and creates an image of the character that corresponds as well as possible to the description of the emotion. In addition to the character, other picture elements can be attached to describe the situation, preferably for example hearts
20 beside a character in love. After composing the image (28) the system attaches the text included in the original message to it, and composes a GMS-message (picture message) thereof. The GMS-message is split into three SMS-messages using known techniques and sent to the receiver (8) – (10) and (29), whose phone number or other information needed to transmit the message was delivered by the sender in the
25 original message (12) and (27).

The receiver's terminal device, for example mobile phone (15) has to be of a kind that is able to display GMS-messages. The sender's device does instead not have to understand GMS-messages, a mere capability to send SMS-messages is enough.

The following is an example, in which the user creates a character and sends information including the picture to a receiver.

Firstly, the user logs on (20) to the www-service (11) of the system with a computer using his phone number and password. The system gets the user's character (22)
5 from the database and offers it for editing. The user edits (23) the character using the interactive www-site and saves the information of the finished character (24) in the database, preferably for example by pressing a Save key on the same page.

To create a message the user sends, with his mobile phone (14) an SMS (27) over
10 the data transfer network to the phone of the server, the SMS preferably including, for example, the following text information: a description of an emotion, expression, position and situation, the phone number of the receiver or other information required to enable delivery of the message, and a message text, for example "I am happy, I am wearing sunglasses. +358501234567. Hello and
15 greetings from Italy! The holidays have started excellently. Greetings, Kustaa". The server (31) receives the message and picks out the description of the situation and the receiver's phone number and the message text. The character (7) created by the user is retrieved (6) from the database, and is edited according to the description (13), in this example the facial expression of the character is changed to happy and
20 sunglasses are added to the character. Next, the server creates a picture message (28), consisting of the image designed from the character and the message text. The server splits the picture message into a required amount of SMS:s and sends (8) them (29) over the data transfer network to the receiver's terminal (15), from which the receiver (10) can read the message.

25

30

Claims

- 5 1. A system for sending messages with pictures, comprising:
- at least one message sending portable terminal device (14), comprising:
- means for wireless and/or cordless and/or wired communication;
 - means for sending SMS:s (27);
 - means for receiving SMS:s (19);
- 10 at least one message receiving portable terminal device (15), comprising
- means for wireless and/or cordless and/or wired communication;
 - means for attaching the received SMS:s into one picture message (Graphic Message Service) (29);
- 15 characterized in that, said system comprises:
- at least one server (30), comprising:
- all means required for communication between a users (14) and a receivers terminal device (15) directly or through any
 - 20 telecommunications network;
 - means (12) for saving information;
 - means for SMS communication (19, 27, 29) directly with the users terminal device and for sending and receiving messages over any wireless or cordless SMS network regardless of the length of said
 - 25 information;
 - means to separate from the message sent by the user, the part meant for editing of the saved picture information;
 - means (28) to produce an edited image of a character based on the information in the message of the user;

- means to send the image produced by the system and the text from the picture message request as a message consisting of SMS:s to the receiver (29);

whereby said terminal devices (11,14,15) and the server (30) are so arranged, that the user can send and/or receive text messages and/or picture messages and/or messages combined of these directly or over any telecommunications network.

2. A method for creating a character (23), characterized in, that the method produces a file describing a character, from which images of emotional states, positions and/or mimics of the character can be generated, and said images are suitable for viewing in a portable terminal device.

3. The method according to claim 2, characterized in, that the user creates the desired character by choosing from ready-made parts saved in a database, or from self-designed parts, a character of a desired appearance, and saves said character in a database (12, 23, 24).

4. The method (28) according to claim 2 and 3, characterized in, that characteristics defined by the user, like an image describing an emotion of the character is compiled by attaching parts possessing the wanted characteristics, like the parts expressing the wanted emotion, from the parts chosen by the user for creating the character.

1/3

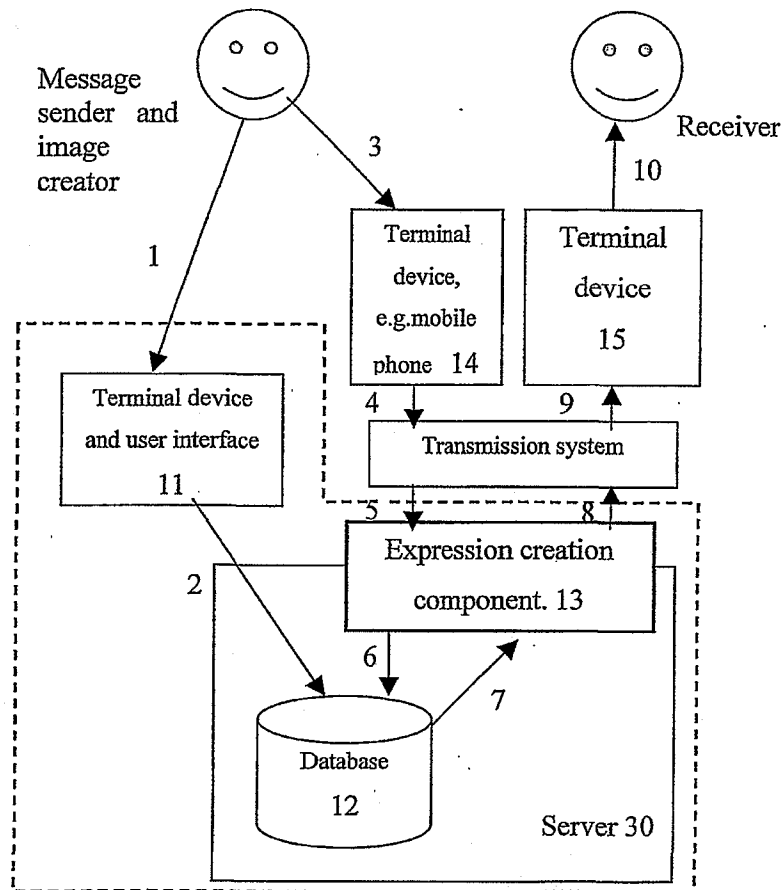


FIG. 1

2/3

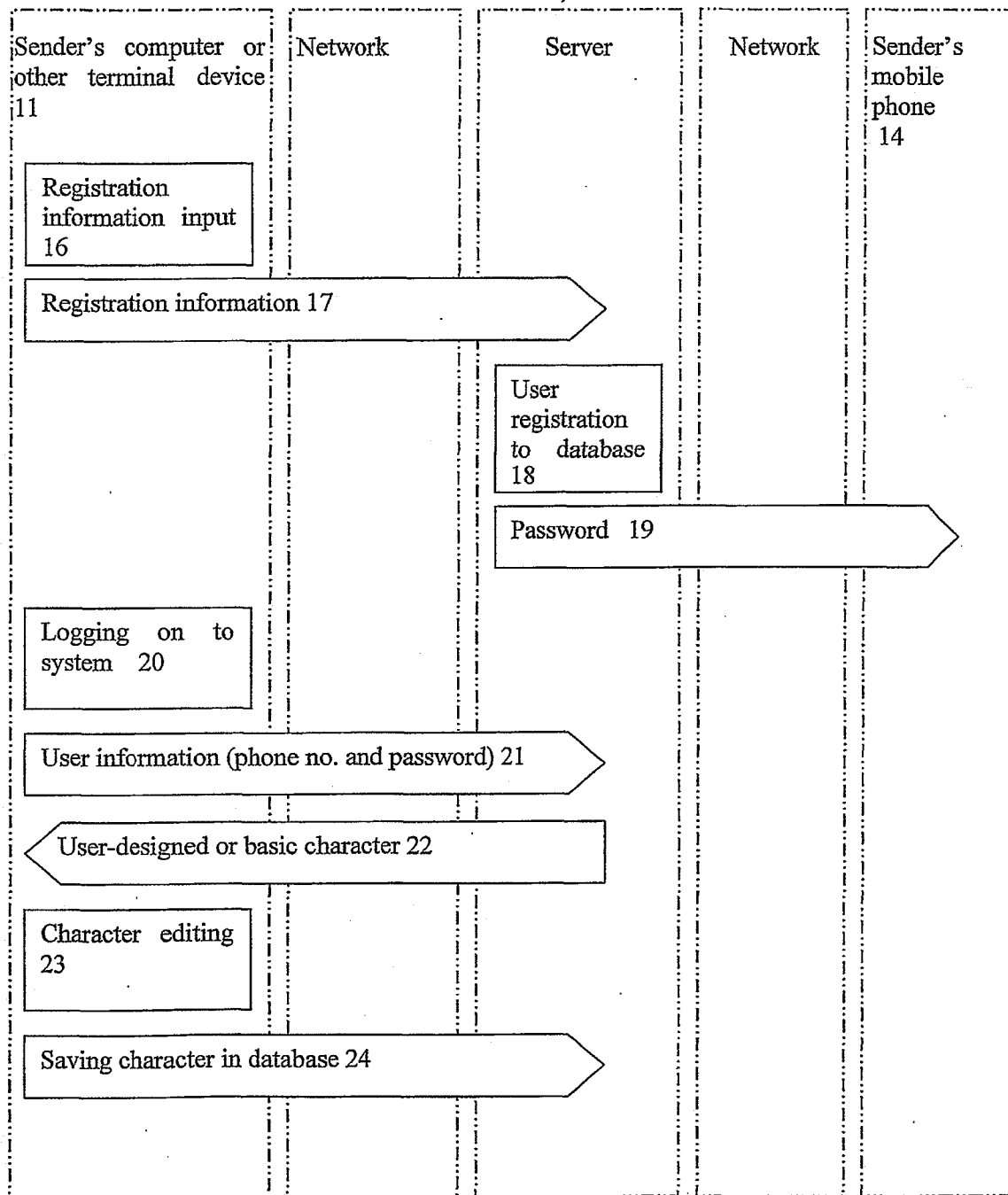


FIG. 2

3/3

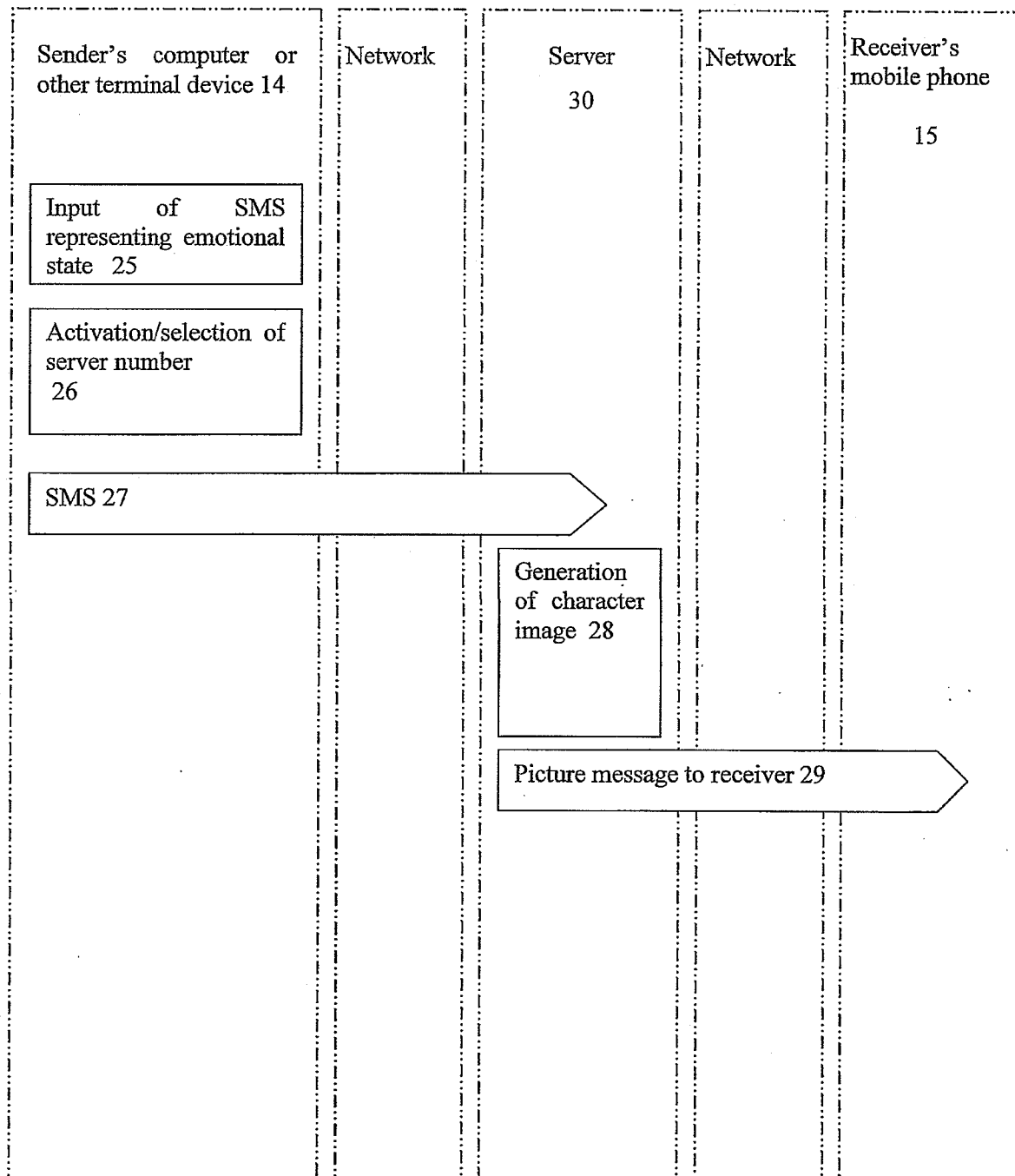


FIG. 3

INTERNATIONAL SEARCH REPORT

International application No.

PCT/FI 01/01098

A. CLASSIFICATION OF SUBJECT MATTER

IPC7: H04Q 7/22

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: H04Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|---|-----------------------|
| X | EP 686949 A1 (CASIO COMPUTER CO., LTD.), 13 December 1995 (13.12.95), column 2, line 13 - column 3, line 36 -- | 1-4 |
| X | GB 2348082 A (NOKIA MOBILE PHONES LIMITED), 20 Sept 2000 (20.09.00), page 3, line 3 - line 6; page 10, line 26 - page 11, line 8, abstract -- | 1-4 |
| X | WO 9937105 A2 (KONINKLIJKE PHILIPS ELECTRONICS N.V.), 22 July 1999 (22.07.99), page 2, line 16 - page 4, line 15 -- | 1-4 |

☒ Further documents are listed in the continuation of Box C.☒ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

Date of mailing of the international search report

12 March 2002

15-03-2002

Name and mailing address of the ISA/

Authorized officer

Swedish Patent Office

Box 5055, S-102 42 STOCKHOLM

Facsimile No. +46 8 666 02 86

Stefan Hansson /js

Telephone No. +46 8 782 25 00

INTERNATIONAL SEARCH REPORT

International application No.

PCT/FI 01/01098

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|---|-----------------------|
| A | EP 1014653 A2 (NORTEL NETWORKS CORPORATION), 28 June 2000 (28.06.00), abstract -- | 1-4 |
| A | WO 9856197 A1 (TELIA AB), 10 December 1998 (10.12.98), abstract -- ----- | 1-4 |

INTERNATIONAL SEARCH REPORT

Information on patent family members

28/01/02

International application No.

PCT/FI 01/01098

| Patent document cited in search report | | | Publication date | Patent family member(s) | | Publication date |
|---|---------|----|---------------------|----------------------------|--------------|---------------------|
| EP | 686949 | A1 | 13/12/95 | NONE | | |
| GB | 2348082 | A | 20/09/00 | AU | 3812500 A | 09/10/00 |
| | | | | EP | 1166533 A | 02/01/02 |
| | | | | GB | 9906316 D | 00/00/00 |
| | | | | WO | 0057617 A | 28/09/00 |
| WO | 9937105 | A2 | 22/07/99 | AU | 6741198 A | 20/10/98 |
| | | | | GB | 9800901 D | 00/00/00 |
| EP | 1014653 | A2 | 28/06/00 | BR | 9912766 A | 02/05/01 |
| WO | 9856197 | A1 | 10/12/98 | AU | 5502598 A | 17/07/98 |
| | | | | BR | 9713975 A | 11/04/00 |
| | | | | EE | 9900258 A | 15/12/99 |
| | | | | EE | 9900558 A | 15/06/00 |
| | | | | EP | 0957922 A | 24/11/99 |
| | | | | EP | 0986926 A | 22/03/00 |
| | | | | HU | 0000397 A | 28/10/00 |
| | | | | IL | 130485 D | 00/00/00 |
| | | | | JP | 2001507024 T | 29/05/01 |
| | | | | NO | 993066 A | 21/06/99 |
| | | | | NO | 995674 A | 06/12/99 |
| | | | | PL | 334012 A | 31/01/00 |
| | | | | SE | 9702124 A | 05/12/98 |
| | | | | SK | 82699 A | 14/02/00 |